



Policy provocation paper: Wellbeing Cost Benefit Analysis (CBAX)

Context

Carnegie UK's Financing the Future programme has examined how governments can use public finance and fiscal processes to improve collective wellbeing. We brought together experts to discuss key challenges and successes across the UK and collaborated with researchers to understand citizens' views on taxation and international practices for wellbeing budgeting. From this work, we identified important principles and practical approaches that governments across the UK can adopt to strengthen their strategies. However, we recognise that embedding wellbeing in budget processes requires more than one-off changes: it requires multiple, coordinated reforms alongside a culture change in collaborative working to improve governance and decision making in this essential area of public policy.

This paper on wellbeing cost benefit analysis is one of three connected policy provocations (with the others looking at enhanced borrowing powers and second round fiscal effects respectively) that set out Carnegie UK's current thinking in an important area of UK fiscal policy. Taken together, these three policy papers aim to prompt debate on improving how wellbeing is embedded in public finances.

This work is intentionally presented as a policy provocation. It does not represent a final or definitive Carnegie UK policy position on this issue. However, we believe there are issues worth articulating and exploring in this policy area. We welcome critique and feedback of the arguments put forward in this provocation.

Introduction

One of the key policy recommendations of Carnegie UK's Financing the Future Programme is a call for governments across the UK to adopt and apply New Zealand style Wellbeing Cost Benefit Analysis models (referred to as CBAX in New Zealand) in their budget setting processes.

The policy rationale for this is that a wellbeing focussed cost benefit analysis model can help to ensure departmental budgets are built around wellbeing priorities. This can help to identify areas of maximum impact from policy investments and serve as a valuable tool for HMT and devolved governments to build public service capability in planning, measuring and delivering for wellbeing outcomes.

This paper sets out further thinking on Carnegie UK's policy rationale and the policy implications for this recommendation against the following headings:

- Executive Summary
- Section 1: Overview of CBAX model in New Zealand
- Section 2: Current UK approach to cost benefit analysis and wellbeing

- Section 3: Devolved government approaches to cost benefit analysis and wellbeing
- References

This paper does not detail the exact model for an enhanced CBA model. Instead, its focus is on setting out the rationale, and principles for why this approach would be useful in delivering an improved approach to fiscal policy making in the UK, that focusses on our collective wellbeing.

Executive Summary

Carnegie UK's Financing the Future programme highlights the need to embed wellbeing into the heart of fiscal decision-making across the UK. We recommend that governments adopt a wellbeing cost benefit analysis (CBA) approach, drawing on international best practice from New Zealand's Wellbeing Cost Benefit Analysis (CBAX) model.

New Zealand's Treasury introduced CBAX in 2015 as a standard tool for appraising budget proposals. It enables departments to assess the monetary value of impacts across 12 wellbeing domains, including fiscal and non-fiscal outcomes such as quality-adjusted life years, wellbeing-adjusted life years (WELLBYs) and environmental shadow prices. By applying consistent values, the CBAX model has contributed to improved quality, transparency, and long-term orientation of budget submissions.

The UK faces profound fiscal and policy challenges: flatlining economic growth, widening inequalities, demographic pressures, and the urgent transition to net zero. Public finances are constrained, yet expectations for government support are rising. Traditional cost benefit approaches focus narrowly on financial returns and short-term efficiency, failing to capture the broader outcomes that matter most to citizens and communities.

Embedding and better adopting wellbeing-focused appraisal into fiscal decision-making across UK governments offers a way to prioritise preventative investment, achieve better value for money across generations, and link spending directly to improvements in collective wellbeing. With devolved governments already operating wellbeing frameworks, though without monetised CBA tools, there is a window of opportunity to modernise the UK's fiscal framework so that budgets systematically align with long-term wellbeing outcomes.

Carnegie UK's position is that adopting a wellbeing-focused CBA framework (similar to the CBAX model in New Zealand) would help to:

- Direct investment toward interventions with the greatest impact on collective wellbeing.
- Support preventative, long-term policy choices.
- Provide transparency and comparability across departments.
- Enhance accountability by linking fiscal policy to outcomes that matter for people, communities, and the environment.

Carnegie UK does not prescribe a specific model for wellbeing cost benefit analysis but encourage UK and devolved governments to look at the principles of the CBAX model in New Zealand. We believe this approach can contribute to ensuring that our complex fiscal policy system in the UK better delivers for collective wellbeing outcomes, now and in the future.

Overview of CBAX model in New Zealand

In 2015, New Zealand implemented the first version of a new cost benefit analysis tool, named [CBAX](#), into its central government budgeting processes. Led by the Treasury, the tool was intended to support agencies to articulate the monetary value of a given initiative over a longer-term period.

The tool is an Excel spreadsheet with a database of nearly 300 pre-populated impacts. These impacts quantify values across 12 wellbeing domains in New Zealand's Living Standards Framework. These include both government and non-government impacts, and fiscal as well as non-fiscal impacts, such as quality adjusted life years (QALYs) and wellbeing adjusted life years (WELLBYs).

Each year, the values associated with each impact are updated by the Treasury. The tool also includes environmental impact values, including "shadow emission values" in low, central, and high price paths to account for uncertainty. The tool encompasses 'discounting' to account for the fact that money today is worth more than the same amount in the future due to factors like inflation and interest.

Users input a range of information, including the details of the intervention; beneficiaries and dis-beneficiaries; benefits and costs; anticipated change from the intervention; and a counterfactual. The tool then produces an analysis that includes net benefits; net economic benefit per cohort member; and estimated return on investment.

This enhanced approach to cost benefit analysis improves consistency across agencies and government by applying a standard value for a range of subjective as well as more objective outcomes. It also encourages a longer-term approach by projecting costs and benefits over a time period of up to 50 years. The CBAX tool supports users to consider the wider impacts of their initiative across different domains or policy areas.

The results of the CBAX analysis are used in conjunction with unmonetized impacts and other factors to inform value for money assessments and are primarily used by the New Zealand Treasury team in developing value for money advice.

Some identified limitations to the use of CBAX as a tool for transformative changeⁱ include a status quo bias; a tendency to underplay environmental and non-market impacts; and a narrow focus in general that may not identify the potential of a sum of multiple projects to achieve change collectively. As with any such tool, it is also the case that the estimates of the benefits are only as reliable as the inputted data and the estimated changes in outcomes associated with each initiative.

- The tool, guidance, case studies, and more information are all publicly available via: <https://www.treasury.govt.nz/publications/guide/cbax-spreadsheet-model>

Summary

After introducing the CBAX approach, the quality of cost benefit analysis presented with budget initiatives in New Zealand improved. The main improvements were not seen in the act of monetising itself, but because the process enables agencies to be more systematic and robust in their policy thinking.

Current UK approach to cost benefit analysis and wellbeing

The Green Book is HM Treasury's official guidance for civil servants in appraising and evaluating policies, programmes, and projects across the UK public sector.

It provides a structured framework to help public servants deliver best public value when using public resources. The Green Book is not a rigid decision-making tool but a set of approved models and methods that support objective advice to decision-makers. It applies to a wide range of activities including:

- Public spending proposals
- Regulatory changes
- Use or sale of public assets
- Major procurement decisions
- Structural changes in government bodies

The Green Book uses the Five Case Model, which ensures that proposals are assessed holistically across strategic, economic, commercial, financial, and management dimensions.

At the heart of the Green Book is social cost-benefit analysis, which aims to assess the overall social value of different policy options. This includes not just financial costs and benefits, but also non-market impacts such as environmental, health, cultural, and social effects.

Key features of the UK Treasury's CBA approach include:

- Valuing non-market impacts: Techniques are provided to estimate the value of things like clean air, mental health, or community cohesion.
- Distributional analysis: The Green Book encourages consideration of how impacts vary across different population groups.
- Risk and uncertainty: Guidance includes methods like Monte Carlo analysis and optimism bias adjustments to account for uncertainty in outcomes.
- Discounting: Future costs and benefits are discounted using a Social Time Preference Rate to reflect societal preferences for present versus future value.

Supplementary guidance on wellbeingⁱⁱ

- Since 2021, the Green Book includes supplementary guidance on wellbeing, which introduces the concept of WELLBYs (Wellbeing-Adjusted Life Years). This allows analysts to monetise changes in subjective wellbeing (e.g. life satisfaction) and include them in CBA. For example, a 1-point increase on a 0–10 life satisfaction scale for one person over one year is valued at approximately £13,000 (2019 prices).
- The guidance also draws on data from the Office for National Statistics (ONS) and encourages the use of wellbeing metrics in business cases and policy evaluations. However, uptake across departments remains uneven and the use of wellbeing in HM Treasury CBA is still considered experimental in many areas

Summary

The UK's approach to accounting for wellbeing in CBA is not as fully embedded as New Zealand's CBAX model. The UK guidance treats inclusion of wellbeing as optional or supplementary where evidence exists, rather than mandatory across all sectors. Some policy areas are more advanced in their use and understanding of wellbeing measures (eg: health, environment, community) than others.

Devolved government approaches to cost benefit analysis and wellbeing

Scotland, Wales, and Northern Ireland do not have a fully embedded, New Zealand-style wellbeing cost benefit analysis framework for policy decisions. However, all three administrations do have wellbeing frameworks and some practice of incorporating wellbeing measures into policy appraisal and evaluation.

Scotland:

- The National Performance Framework (NPF) is Scotland's central wellbeing framework. It is aligned with the UN Sustainable Development Goals and has a broad dashboard of social, environmental, and economic outcomes and associated indicators. The NPF is intended to guide policy priorities across central and local government and public bodies.
- Scottish Government's Business and Regulatory Impact Assessments (BRIAs) follow UK Treasury's Green Book methodology. Since 2021, departments are encouraged to use the Green Book supplementary guidance on wellbeing (WELLBYs etc.), but it's not mandatory.
- In practice, wellbeing evidence is often used qualitatively (to support priorities or distributional analysis), not consistently monetised into formal cost benefit analysis in Scotland.

Wales:

- The Well-being of Future Generations (Wales) Act 2015 is the strongest statutory wellbeing framework in the UK.
- Public bodies must pursue seven wellbeing goals and follow the "five ways of working" (long-term, prevention, integration, collaboration, involvement).
- The Act requires wellbeing considerations in strategic planning and budgeting; however, the Welsh Treasury still uses Green Book-style CBA for fiscal/economic analysis. The Act does require wider wellbeing questions to be asked.
- Wellbeing is more structurally embedded in Wales than in Scotland or Northern Ireland. However, methods to account for and analyse wellbeing in policy consideration are less monetisation-driven than the CBAX model in New Zealand.

Northern Ireland:

- Northern Ireland's Outcomes Delivery Framework (ODF) is based on 12 outcomes linked to wellbeing, designed to be cross-cutting.
- NI departments are expected to use HM Treasury Green Book and can use the supplementary wellbeing guidance.
- Northern Ireland's cost benefit analysis model is less developed than Wales or Scotland. Wellbeing outcomes are present in policy rhetoric and outcome frameworks but are not regularly applied in CBAs.

Summary

Wales has the strongest legal underpinning for including wellbeing in central budgeting and strategy, but at present it is used in a less monetised CBA model than that of New Zealand. Scotland and Northern Ireland have both adopted wellbeing language in policy frameworks but still use primarily traditional cost benefit analysis models. All three devolved governments rely on the UK Treasury Green Book and its optional wellbeing guidance. No devolved government has developed its own equivalent to New Zealand's CBAX tool or mandated monetised wellbeing valuation. Devolved governments do, however, use wellbeing frameworks to help set policy priorities. This represents a significant missed opportunity for devolved governments to better align cross-cutting policy frameworks with investment modelling and decision frameworks.

References

ⁱ How well suited is cost-benefit analysis to transformative change?

<https://www.mbie.govt.nz/business-and-employment/economic-growth/previous-economic-development-work/sustainable-and-resilient-economy-transformation/which-analytical-tools-are-suited-to-transformative-change/how-well-suited-is-cost-benefit-analysis-to-transformative-change>

ⁱⁱ Summary of HM Treasury's Green Book: Valuation of Wellbeing Guidance for Appraisal:

<https://whatworkswellbeing.org/blog/summary-of-hm-treasurys-green-book-valuation-of-wellbeing-guidance-for-appraisal/>